
**Course:** Web and Mobile Application Development (CS3077)

# College Bazaar

*A Smart Marketplace for Students to Buy and Sell*

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# Contributions

Components I have worked on:

- Frontend/Client
- Backend/Server
- Database
- Authentication & Authorization
- UI
- SRS Report
- PPT

# PROJECT OVERVIEW

**Objective:**
To create a digital marketplace exclusively for college students, enabling them to trade used goods easily, securely, and within their campus boundaries.

**Vision:**
To make campus commerce sustainable and efficient through digital innovation.

**Key Goals:**

- Simplify the process of listing and finding used items.
- Encourage sustainability through product reuse.
- Build a verified student community for safe transactions.
- Foster peer-to-peer interaction through direct communication tools.

# KEY FEATURES

**1) Product Listings:**

Students can upload item details with clear images, pricing, and descriptions.

**2) In-App Chat:**

Enables instant, secure communication between buyers and sellers to negotiate and clarify product details.

**3. Category Filtering:**

Search items based on type — books, gadgets, furniture, fashion, etc.

**4) User Verification:**

Only university-verified users can sign up using official email IDs, ensuring authenticity.

**5) Ratings & Feedback:**

Allows users to leave reviews, promoting trust and reliability in transactions.


# USER EXPERIENCE GOAL

- **Simple Listing Process:** Item upload is quick and intuitive, requiring minimal information while maintaining clarity.
- **Clean & Interactive Interface:** Built for smooth navigation with a responsive layout for both desktop and mobile users.
- **Secure Communication:** Encrypted chat ensures privacy and security between users.

# Submission & Purchase Flow

- **Listing:** Seller uploads item details, image, and price.
- **Discovery:** Buyer browses listings or searches for specific items.
- **Communication**: Buyer initiates chat to ask questions or negotiate.
- **Transaction:** Both parties agree on price and meeting method.
- **Completion:** Item is marked as sold, and feedback is exchanged.

# User Features

**For Sellers:**

- Post listings with detailed descriptions and images.
- Edit or delete items as needed.
- Track item status (Available / Sold).

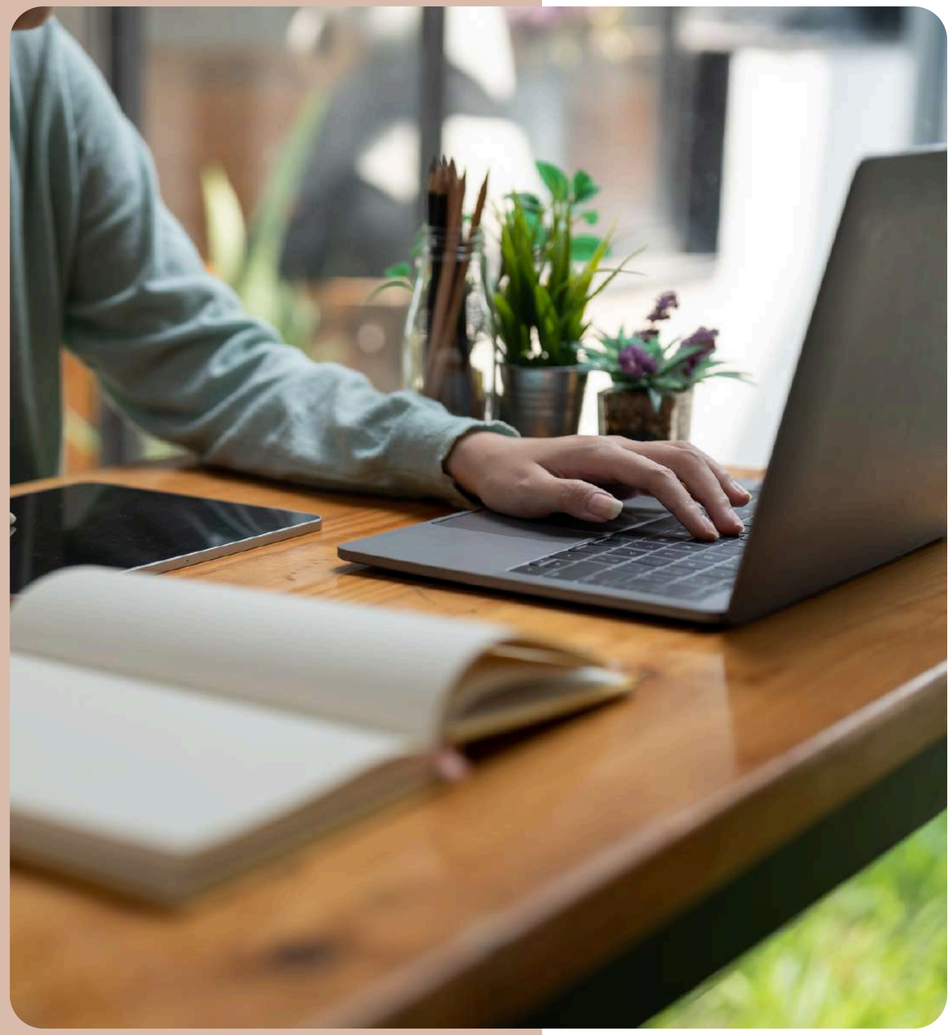
**For Buyers:**

- Browse or filter items by category and price.
- Contact sellers directly through chat.
- Save favorite items for later.

**User Profiles:**
Each profile maintains a history of listings, purchases, chats, and reviews, helping students manage their marketplace activity easily.

# Verification & Security

- **Verified Access:** Only users with valid university email addresses can register.
- **Data Privacy:** All user data is encrypted, ensuring personal information remains confidential.
- **Admin Oversight:** Admins review suspicious listings or repetitive reports to ensure safety.
- **Community Trust:** Transparent profiles and feedback help maintain a trustworthy marketplace.



# ADMIN PANEL

**Admin Responsibilities:**

- Approve or reject listings based on content quality and compliance.
- Monitor flagged posts and handle user reports efficiently.
- Resolve disputes between users fairly.
- Track key statistics such as active users, listings, and transactions.

**Dashboard Highlights:**

Real-time insights into platform performance and user engagement to maintain smooth operation.

# Tech Stack

**Frontend:**

React.js: Enables modular, fast, and dynamic UI updates.
Tailwind CSS: Provides responsive design and easy customization.

**Backend:**

Node.js + Express.js: Powers the API for fast and scalable server communication.

**Database:**

MongoDB: Stores all product, chat, and user data efficiently in a flexible schema.

**Authentication & Notifications:**

Firebase: Provides secure login, user verification, and real-time updates on new messages and listings.

# System Architecture

System architecture connects three core layers:

- **Frontend (React):** User interface for buyers, sellers, and admins.
- **Backend (Node.js/Express):** Processes requests, handles authentication, and manages business logic.
- **Database (MongoDB):** Stores user profiles, item details, and chats.

This layered architecture ensures scalability, maintainability, and real-time responsiveness.

# Benefits

**For Students:**

- Access affordable goods and save money.
- Sell unused items conveniently within campus.

**For Sellers:**

- Earn extra cash while decluttering personal spaces.

**For the University**:

- Encourages sustainability by promoting reuse.
- Strengthens community connections among students.

**Overall Impact:**
Creates a circular economy within campus, reducing waste and supporting student collaboration.

# Future Scope

- **AI-Powered Price Suggestions:** Suggests fair prices for listings.
- **Secure Payment Gateway:** Enables safe digital transactions directly on the platform.
- **Campus Delivery Options:** Integration with local delivery services or pickup points.
- **Cross-Campus Marketplace:** Expansion to connect nearby colleges for larger trade networks.
- **Mobile App Launch:** Dedicated Android and iOS apps for easy access and notifications.

# Conclusion

- College Bazaar bridges the gap between buyers and sellers in university environments by offering a secure, student-exclusive marketplace. It simplifies peer-to-peer transactions while building a responsible, sustainability-driven culture on campus.
- The platform combines convenience with trust — from verified logins and moderated listings to a friendly chat interface that fosters collaboration. Its scalable architecture and modern tech stack ensure long-term adaptability and reliability.
- Beyond being a trading platform, College Bazaar aims to create a stronger, greener, and more connected campus community — one where every student can contribute to and benefit from a sustainable cycle of sharing and reusing.